

VU Research Portal

Secrecy and persistent problems in sexual assault victims.

Ensink, B.J.; Winkel, F.W.; Berlo, van, W.

published in

International Criminal Justice Review
2001

DOI (link to publisher)

[10.1177/105756770001000105](https://doi.org/10.1177/105756770001000105)

document version

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

citation for published version (APA)

Ensink, B. J., Winkel, F. W., & Berlo, van, W. (2001). Secrecy and persistent problems in sexual assault victims. *International Criminal Justice Review*, 10, 81-98. <https://doi.org/10.1177/105756770001000105>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl

International Criminal Justice Review

<http://icj.sagepub.com/>

Secrecy and Persistent Problems in Sexual Assault Victims

Bernardine J. Ensink, Willy van Berlo and Frans Willem Winkel

International Criminal Justice Review 2000 10: 81

DOI: 10.1177/105756770001000105

The online version of this article can be found at:

<http://icj.sagepub.com/content/10/1/81>

Published by:



<http://www.sagepublications.com>

On behalf of:

[Georgia State University, College of Health and Human Sciences](#)

Additional services and information for *International Criminal Justice Review* can be found at:

Email Alerts: <http://icj.sagepub.com/cgi/alerts>

Subscriptions: <http://icj.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://icj.sagepub.com/content/10/1/81.refs.html>

SECRECY AND PERSISTENT PROBLEMS IN SEXUAL ASSAULT VICTIMS*

**Bernardine J. Ensink, Willy van Berlo,
and Frans Willem Winkel**

A substantial number of victims of sexual assault refrain from disclosing to others the victimizing episode and its emotional consequences. A prospective study ($n = 36$ rape victims reporting their victimization to the police) and a retrospective study ($n = 33$) were conducted to examine the determinants of postponed disclosure and its impact on persistent problems. In the prospective study the time interval between trauma and disclosure was at most one month. In the retrospective study 33 percent postponed disclosure for two years or more. Both studies revealed that postponed disclosure is associated with type of perpetrator: Victims of intimate perpetrators were more inclined to postpone reporting than victims of unknown perpetrators. Postponed disclosure predicted health problems in both studies. In the prospective study postponed disclosure predicted frequency of visits to the doctor and use of medication. Initial feelings of numbness contributed to the use of medication as well. In the retrospective study postponed disclosure predicted psychosomatic complaints and use of medication, even when the time between the assault and the interview was taken into account. Type of perpetrator did not moderate the correlation between postponed disclosure and health problems. Some implications for victim support will be discussed.

Substantial numbers of victims of sexual assault keep the assault secret from others. Findings reported by Wyatt, Notgrass, & Newcomb (1990) and Ullman (1996a, 1996b) revealed that nondisclosure for at least one year ranged from 18 percent to 38 percent. Disclosure is generally more common in cases involving an unknown perpetrator. Women raped by a partner or an ex-partner are the least inclined to report these traumatic experiences (Ullman & Siegel, 1993). Sexual trauma often elicits feelings of shame because victims feel that their "reputation" is at stake. Dahl (1993) reported that 91 percent of surveyed sexual assault victims experienced feelings of shame during the time immediately following the assault. Looking at oneself through the eyes of another person and expecting negative appraisals from others often underlie such feelings.

Other emotional processes, including a constriction of emotional experiences, may also disrupt reporting behavior. Numbness—a constriction of emotional experiences—is regularly observed in the aftermath of trauma according to Horowitz (1986). Numbness is generally conceived as a transient state after a traumatic experience. Such a condition might interfere with the inclination to report. A more permanent state of emotional constriction is called alexithymia.

*We are indebted to ZorgOnderzoekNederland (ZON), Nationaal Vonds voor de Geestelijke Volksgezondheid (NCGV), and the Achmea Foundation: Victim and Society for financially supporting this study.

Victims exhibiting alexithymia find it difficult to identify and describe emotional experiences and thus to communicate their feelings (Berenbaum & James, 1994; Sifneos, 1972; Taylor, 1987; Taylor, Bagby, & Parker, 1997). Secrecy—actively withholding emotional information—is the most drastic form of impairment of sharing behavior, although feelings of shame and emotional constriction may result in more subtle forms of impairment.

Social sharing represents spontaneously initiated ways of emotional processing facilitating a reintegration of the emotional experience, recovery, and emotional relief (Rime, 1995). Victims of sexual trauma who do not share the episode or its emotional impact do not spontaneously utilize means that speed up the recovery process. Secrecy and the other impairments of sharing behavior have several disturbing implications:

1. Secrecy may create an obsessive preoccupation with the incident and its impact and may cause thought suppression. Thought suppression may inadvertently cause increased intrusive thoughts. These intrusive thoughts may cause renewed efforts at thought suppression, eventually resulting in a self-perpetuating cycle (Wegner & Lane, 1995; Wegner, Schneider, Carter, & White, 1987). A trauma normally triggers repeated intrusions of traumatic memories during the first month post-trauma. Thought suppression of these traumatic memories in the acute phase has paradoxically been found to evoke obsessive intrusions of traumatic memories (Ensink & van Berlo, 1999; Pennebaker, Hughes, & O'Heeron, 1987). Ongoing thought suppression may create chronic intrusions, which form part of the posttraumatic stress disorder (PTSD).

2. Not sharing severe traumatic experiences has negative health implications, whereas disclosure has been found to enhance health (Pennebaker, Barger, & Tiebout, 1989). Improvement is more substantial if the sharing of factual information is coupled with the expression and ventilation of negative emotions. Short-term inhibition of such emotions results in increased autonomic nervous system activity. Long-term inhibition serves as a low-level cumulative and general biological stressor, exerting a cumulative impact, causing and exacerbating a variety of health problems (Pennebaker, 1993).

3. Nondisclosure may also result in “emotional faking.” Most victims are upset after a trauma, but if they do not share the trauma and want to keep the sexual trauma secret, they have to fake in order to feel untouched, while they actually feel very upset inside. The pretending attitude that “nothing has happened” makes it difficult for others to engage in empathic relationships with the victim, preventing mutual bonding or disrupting existing relationships. Social isolation, detachment from relevant others, and alienation are potential consequences (Banks, 1997).

A prospective and a retrospective study were conducted with adult victims of sexual assault. The first issue considered in both studies was whether type of perpetrator is related to impaired sharing characteristics, such as time interval between victimization and disclosure of the sexual assault (postponed sharing),

feelings of shame, and constriction of the emotional reactions. The second issue was whether impaired sharing of factual or emotional information is predictive of persistent intrusive memories, health complaints, and a lack of empathic relationships.

STUDY 1: PROSPECTIVE STUDY ON SHARING AND LONG-TERM PROBLEMS

Method

Subjects

Sexual assault victims were recruited via police departments located in different regions of the Netherlands. When female victims 18 years or older reported a rape or an attempted rape, the police provided them with information about our study. In order to examine who responded positively, two samples were drawn. In the first months of the study we contacted the police and asked them about the number of sexual assault victims 18 years or older who were presented with pertinent information. This number was compared with the number of women agreeing to participate in the study during the first months. The response rate was found to be 70 percent. In a second sample a similar comparison was made: 29 percent of the victims informed by the Amsterdam police participated in the study. A total of 39 sexual assault victims agreed to be interviewed 1 to 2 months, 3 to 4 months, and 9 to 15 months after the sexual assault. In the course of the study 8 percent of these victims dropped out, so our final sample consisted of 36 sexual assault victims. The women in the study had a mean age of 31 years ($M = 31.10$, $SD = 12.17$; median 28 years).

Instruments

1. Questions about assault characteristics, such as type of perpetrator, were based on a questionnaire developed by Frenken, Ruitenberg, and Rombouts (1995). Perpetrators were categorized as known and unknown. Known perpetrators were further categorized as superficial acquaintances, friends, ex-partners, and family members and authority figures. In the analyses to be reported, distinctions were made between unknown perpetrators, superficial acquaintances, and intimate contacts (friends, ex-partners, and family members).

2. Postponed sharing was assessed via a question about the time interval between the sexual assault and the disclosure of this event to somebody within the victim's own social network. This question had the following answer categories: immediately (1), after a few hours (2), after one day (3), within one week (4), within one month (5).

3. The intensity of feelings of shame was assessed through questions about the immediate emotional reactions, among others feelings of shame during the sexual assault and the intensity of the emotional reactions in the period immediately following the assault. Intensity ratings were quantified on a 7-point scale.

4. Constriction of emotional feelings was assessed through questions on numbness and alexithymia. Three Posttraumatic Stress Diagnostic Scale (PDS) items, "feeling numb," "feelings of social detachment," and "markedly diminished interest in significant activities," have been found to indicate numbness due to traumatic experiences (Litz et al., 1997). Alexithymia was measured with the Dutch Bermond-Vorst 40-item alexithymia scale with a 5-category response format (Vorst & Bermond, 2001). This scale has 5 subscales: verbalizing feelings, fantasy, insight, emotionality, and analyzing feelings. The scale is constructed in such a way that positively and negatively formulated questions about alexithymia are randomly distributed. Factor analysis showed that positively formulated and negatively formulated questions of the same subscale do not load on the same factor. Of the 40-item scale, 8 items were used, all loading high and positively (ranging .54 to .70) on one factor called "difficulties identifying and describing feelings" (Ensink, Winkel, & Van Berlo, submitted). The reliability of this subscale is good; Cronbach's $\alpha = .84$.

5. Intrusions of traumatic memories one year after the trauma were assessed with the Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995). The PDS manual provides guidelines to diagnose posttraumatic stress disorder according to the criteria of the DSM IV (American Psychiatric Association, 1994). Intrusive traumatic memories are a cluster of symptoms incorporated in posttraumatic stress disorder.

6. Health problems were assessed in three different ways: (a) The SCL-90 subscale "somatization" was used to assess psychosomatic complaints (Derogatis, Lipman, & Civi, 1973). (b) Frequency of visits to the doctor ranged from no medical visits to five or more visits during the last two months. (c) The use of medication and the type of medication prescribed were examined. Visits to the doctor for purposes of contraception were excluded from the medical record.

7. Lack of empathic relationships was assessed in three different ways. Negative reactions of the partner were assessed through a scale including the following items: The partner was upset to such a degree that he could not give the victim the attention she needed, withdrew emotionally, held the victim responsible, denied the assault, was overprotective, or felt victimized himself. Two or more of such reactions were taken as a cutoff score indicating a severe negative reaction. Negative reactions of other social intimates were assessed with two questions about absence of warm supportive reactions and emotional withdrawal after disclosure. The overall satisfaction with social support from the informal social network was assessed one year post-assault with a 7-point scale ranging from 1 (not satisfied at all) to 7 (very satisfied).

Procedure

The first interview in the prospective group (1 to 2 months after the sexual assault) included questions on the characteristics of the sexual assault, shame, numbness, alexithymia, and sharing behavior. The last interview, about one year post-assault, included questionnaires about posttraumatic stress, SCL-90 "somatization," health problems, and empathic relationships from the social environment.

Results

Descriptive results

Characteristics of the sexual assault

Fifty-five percent of the victims had experienced a sexual penetration (genital, anal, or oral) and 59 percent were subjected to extreme violent acts, such as the use of a weapon, binding, hostage taking, strangling, or the use of excessive physical violence. Fifty-nine percent of the perpetrators were known to the victims; in 24 percent of cases he was a superficial acquaintance, in 8 percent a friend, in 13 percent an ex-partner, in 3 percent a family member, and in 10 percent a person who had some authority. One third of the victims had had very frequent contacts with the perpetrator (weekly or more) pre-assault.

Sharing and constriction of emotions

Immediately after the trauma 77 percent reported the sexual assault, 13 percent reported within one week, and 10 percent reported the experience between one week and one month after the assault (Figure 1).

Extreme feelings of shame were experienced immediately after the sexual assault by 20 percent of the victims (score of 7 on a 7-point scale), and 55 percent felt rather ashamed. The mean score for numbness was $M = 3.49$, $SD = 2.96$, and for alexithymia $M = 2.38$, $SD = .92$ (Table 1).

Intrusions

A year after the assault 25 percent of the victims reported experiencing two or more intrusions of traumatic memories a week, 47 percent were diagnosed with PTSD one year post-assault, and an additional 28 percent exhibited moderate to severe posttraumatic stress symptoms.

Figure 1

Time Interval Between Victimization and Disclosure of Sexual Assault

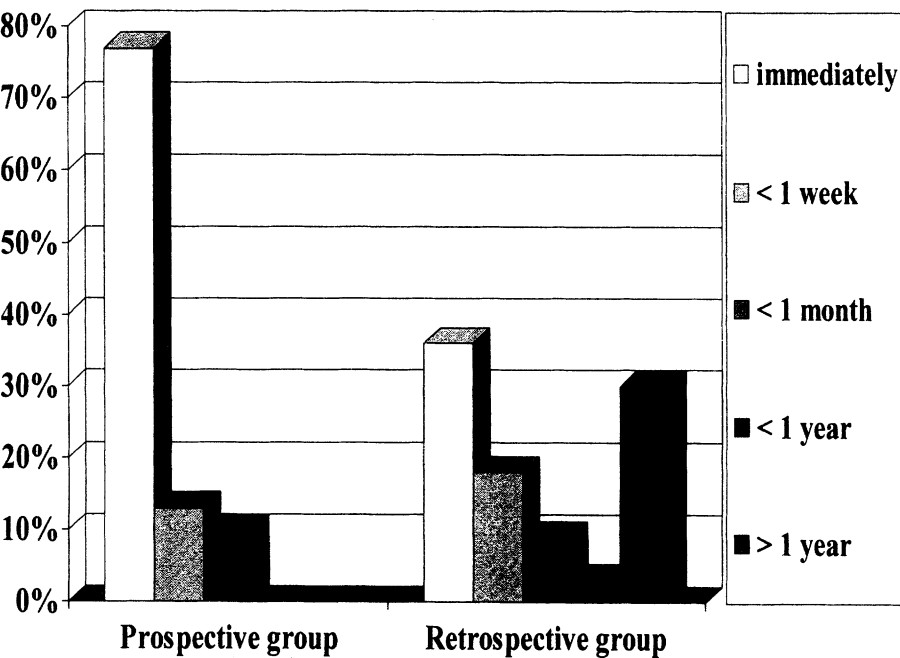


Table 1

Means and Standard Deviations on Sharing and Sharing-Related Variables in the Prospective and Retrospective Groups

	Prospective group (<i>n</i> = 36)		Retrospective group (<i>n</i> = 33)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Postponed sharing ^a	1.92	(1.46)	6.91	(6.07)
Feelings of shame	3.84	(2.39)	4.28	(2.49)
Alexithymia	2.38	(.92)	2.37	(.94)
Numbness	3.49	(2.96)	3.31	(2.91)
Psychosomatization	24.80	(10.82)	22.25	(8.31)
Dissatisfaction with social support	5.80	(1.33)	3.92	(2.21)

^aIn the prospective group the postponed sharing answer format ranged from 1 to 5. In the retrospective study the answer format ranged from 1 to 12.

Health problems

In the two-month period preceding the interview a year post-assault, 39 percent visited a doctor more than two times and 58 percent took medication for a variety of illnesses, such as infections, immune diseases, or psychological problems. The mean score for somatization was $M = 24.80$, $SD = 10.82$. This mean score falls within the range of high scores for normal populations (scores range from 22 to 33); 56 percent had scores above average, and 40 percent scored in the high or very high range.

Relationships

Half of the victims had an intimate partner or husband at the time of the assault. Of the victims with a partner, 45 percent broke the relationship in the year after the assault, 30 percent experienced no or not many negative reactions, and 26 percent got several negative reactions from a partner in the year after the sexual assault.

Thirty-nine percent indicated a year post-assault that they had received only empathic relationships from other persons in their social environment, 54 percent had experienced either no warm reactions or emotional withdrawal, and 7 percent had experienced both types of reactions. The overall ratings of the social support from the informal social network were as follows: 40 percent were extremely satisfied with the social support they got the year after the trauma (score of 7) and 10 percent were not satisfied with the social support (score of 3–1); the others were satisfied (score of 6–4).

Type of perpetrator and impaired sharing of factual or emotional information

Victims assaulted by an unknown perpetrator were the least inclined to postpone disclosure, $M = 1.38$, $SD = .62$, whereas victims assaulted by an intimate contact were the most inclined to postpone, $M = 2.78$, $SD = 2.28$, $F(2, 36) = 2.97$, $p = .06$. The frequency of contact between victim and perpetrator before the assault predicted postponed disclosure ($r = .38$, $p < .05$). In other words, the more the victim and the perpetrator saw each other in the period before the sexual assault, the more the victim was inclined to postpone sharing. Victims assaulted by a known perpetrator reported more feelings of shame than victims of unknown perpetrators, $F(1, 36) = 6.41$, $p < .05$. Intensity of feelings of shame varied by the frequency of contact with the perpetrator before the assault, $F(3, 34) = 3.48$, $p < .05$. The degree of numbness or alexithymia was not associated with type of perpetrator.

Does impaired sharing predict intrusions, health problems, and lack of empathic relationships?

Intrusions of traumatic memories

None of the sharing characteristics predicted the severity of intrusions (Table 2).

Table 2

Percentage of Victims in Each City Affected at the Time

<i>n</i> = 36	Intrusions	SCL-90 somatization	Visits to physician	Use of medicine	Negative reaction from partner	Negative reaction from others	Dissatisfaction with support
Postponed sharing	.16	.23	.51**	.36*	-.08	.09	-.13
Alexithymia	-.26	-.19	.04	.14	.19	.10	.16
Numbness	.33	.21	.04	.43*	.27	.25	.40*
Shame	.31	.18	.35*	.20	-.32	-.16	.25
Type of perpetrator	.11	.02	.10	.06	-.03	-.06	-.02

* $p < .05$. ** $p < .01$.

Health problems

Postponed sharing predicted frequency of visits to a medical doctor ($r = .51, p < .01$) and consumption of medication ($r = .36, p < .05$) a year after the assault (see Table 2). Initial numbness also predicted medication consumption ($r = .43, p < .05$). Initial feelings of shame predicted the frequency of visits to the doctor a year post-assault. None of the sharing characteristics predicted psychosomatic complaints one year post-assault. Postponed sharing was the only variable contributing independently to frequency of visits to the doctor a year post-assault. Medication consumption was independently predicted by both initial numbness and postponed sharing ($R = .58$, explained variance $R^2 = 30\%$, respectively $B = .35, p < .05$, and $B = .45, p < .01$).

Social relationships

Initial numbness predicted the degree of dissatisfaction with social support one year post-assault ($r = .40, p < .05$). These results suggest that impairment of sharing, especially its most drastic variant "postponed sharing," predicted health problems one year post-assault. An important question is whether postponed

sharing predicted health problems independently of type of perpetrator, which was found to predict postponed sharing. When type of perpetrator was held constant, the correlations between postponed sharing and visits to the doctor ($r = .49, p < .01$) or medication consumption ($r = .35, p < .05$) were found to be similar to the simple correlations. These results suggest that postponed sharing predicted medical behavior, independently of type of perpetrator involved.

STUDY 2: RETROSPECTIVE STUDY ON SHARING AND LONG-TERM PROBLEMS

The retrospective study had research questions that were similar to those in the prospective study. This study included victims of sexual assault who were interviewed two years or longer after a sexual assault.

Method

Subjects

The retrospective group consisted of 33 victims, mainly recruited via a television talk show about “rape and its aftermath” and by advertisements in newspapers. In 45 percent of the cases the sexual assault had taken place at least 8 years before the victim’s participation in the study; the mean time interval between the sexual assault and the interview was 14 years and 3.48 months, $SD = 13.08$. The mean age of the victims was $M = 35.70$ years, $SD = 12.37$.

Instruments

Instruments assessing intrusions of traumatic memories, somatization, frequency of visits to the doctor, medication consumption, empathic relationships from the social environment, and satisfaction with support were the same as in the prospective study. The questions on numbness, alexithymia, feelings of shame, and type of perpetrator were also identical to those in the prospective study.

The question about the time interval between assault and disclosure differed from the prospective study in response format. The time interval could be much longer than one month in the retrospective study. The response format included these categories: immediately (1), after a few hours (2), after one day (3), within one week (4), within one month (5), within two months (6), within half a year (7), within 1 year (8), within 2 years (9), within 5 years (10), within 10 years (11), after 10 years or longer (12).

The question about partner reactions was limited to the reaction of the person who was the victim’s partner at the time of the sexual assault, because the partner reaction was thought to have the most impact in the time immediately following the

assault. The questions about impaired social relationships referred to the time interval between assault and interview and were not limited to the period of a year as was the case in the prospective study.

Results

Descriptive results

Characteristics of sexual assault

Sexual penetration was experienced by 66 percent of the victims, and 55 percent of the victims were subjected to brutal, life-threatening violence. The perpetrator was known to 51 percent of the victims, in 30 percent of the cases they were intimately connected (ex-partner, partner, or family member), and the perpetrator was superficially acquainted with the victim in 21 percent of the cases. In 38 percent of the cases the perpetrator and the victim had had frequent contact before the assault (weekly or more).

Sharing and constriction of emotions

The trauma was disclosed immediately by 30 percent of the victims, 33 percent waited two years or longer, and the others reported the assault not immediately but within two years after the incident (see Figure 1). Extreme feelings of shame (score of 7) were reported by 16 percent of the victims, and 52 percent felt rather ashamed. The mean numbness score was $M = 3.31$, $SD = 2.91$, and the mean alexithymia score was $M = 2.37$, $SD = .94$.

Intrusions

At the time of the interview 52 percent of the victims exhibited intrusions twice or more a week, 58 percent had been diagnosed with PTSD, and 51 percent experienced moderate to severe posttraumatic stress symptoms.

Health problems

The doctor had been visited by 32 percent of the victims two times or more during the previous two months before the interview, and 41 percent used medications, contraception excluded. The mean score on the psychosomatic subscale of the SCL-90 was $M = 22.25$, $SD = 8.31$. This mean score falls within the high score range; 62.5 percent scored above average and 37.5 percent scored in the high to very high range for normal populations.

Relationships

At the time of the assault 33 percent of the victims had an intimate partner. Twenty percent have had a partner who did not react in a negative way, or reacted only mildly negatively, and 13 percent have had a partner who reacted severely negatively to the sexual assault.

Of the victims, 33 percent got warm empathic relationships from others in their social network without emotional withdrawal, 36 percent were confronted with either a lack of empathic relationships or emotional withdrawal, and 21 percent experienced both types of reactions. The overall ratings of the social support received from the informal social network revealed that 10 percent were extremely satisfied with the social support that they received (score of 7), 24 percent were not satisfied (score of 3–1), and the others were satisfied (score of 6–4).

Type of perpetrator and impaired sharing of factual or emotional information

The variation in postponed sharing differed significantly by type of perpetrator—unknown, acquaintance, and intimate— $F(2, 30) = 6.18, p < .01$. Post hoc Bonferroni correction showed that victims assaulted by unknown or superficially known perpetrators differed significantly from victims of intimate perpetrators in postponed sharing (respective levels of significance $p < .01$ and $p < .05$). Victims of intimate perpetrators postponed sharing for a longer time than victims of unknown or superficially known perpetrators. Factors that possibly impair sharing behavior, such as the retrospectively reported intensity of feelings of shame, numbness, or alexithymia, did not vary by type of perpetrator. The longer the victims had postponed sharing, the more they were inclined to feel numb years after the traumatization ($r = .43, p < .05$).

Does impaired sharing predict intrusions, health problems, and lack of empathic relationships?

Intrusions

Persistent intrusions of traumatic memories were associated with postponed sharing ($r = .47, p < .05$), numb feelings ($r = .71, p < .00$), alexithymia ($r = .51, p < .05$), and feelings of shame ($r = .39, p < .05$). Stepwise regression analysis with postponed sharing, numbness, alexithymia, and shame as independent variables and persistent intrusions as dependent variable showed that numbness was the only variable that contributed significantly and independently to the variation in persistent intrusions. Numbness and intrusions are both symptoms of the posttraumatic stress disorder and are well described alternating phases in this chronic disorder, so the finding that numbness predicted intrusions is self-evident.

A new multivariate analysis was performed, in which numbness was excluded. Alexithymia was then found to be the only variable contributing to the variance in intrusions ($B = .44, p < .01$).

In the retrospective group there was a considerable variation between the victims with respect to the time between the sexual assault and the research interview. Persistent intrusions decline over time, and some of the sharing characteristics may exert their impact over a longer time period. Partial correlations, taking into account the time between the assault and the interview, were examined. These partial correlations (Table 3) were not much higher than the simple correlations, indicating that the impact of sharing characteristics on persistent intrusions did not change over time.

Table 3

Pearson and Spearman Correlations Between Characteristics of Impaired Sharing and Persistent Intrusions and Health Problems in Retrospective Group and Partial Correlation, Controlling for Lapse of Time Between Sexual Assault and Study

<i>n</i> = 36	Intrusion		SCL-90 somatization		Visits to physician		Use of medicine	
	<i>r</i>	<i>pr</i>	<i>r</i>	<i>pr</i>	<i>r</i>	<i>pr</i>	<i>r</i>	<i>pr</i>
Postponed sharing	.47*	.50*	.67**	.66**	.36	.31	.43*	.49*
Numbness	.71**	.73**	.61*	.65**	.14	.20	.30	.35
Alexithymia	.51*	.51*	.45*	.47*	.12	.14	.34	.35
Shame	.39*	.46*	.47*	.51*	-.09	-.05	.21	.28
Type of perpetrator	.11	-.01	.01	.09	-.26	-.27	.24	.29

* $p < .05$. ** $p < .01$.

Health problems

Postponed sharing, numbness, alexithymia, and intensity of feelings of shame were associated with psychosomatic complaints (respectively, $r = .67, p < .00, r = .61, p < .01, r = .45, p < .05, r = .47, p < .05$; see Table 3). Postponed sharing was the only variable independently predicting somatization ($R = .71$, explained variance $R^2 = 50\%$). When the time between the assault and the interview was taken into account, correlations between sharing characteristics and psychosomatic complaints tended to increase mildly over time.

Postponed sharing was associated with medication consumption ($r_s = .43, p < .05$). The other characteristics were not associated with medication consumption. When time between assault and interview was taken into account, the partial correlation between postponed sharing and medication consumption increased

slightly ($pr = .49, p < .05$). It would be interesting to see whether somatization, frequency of visits to the doctor, or consumption of medication declined (at a statistical level) in the course of time after the sexual assault. No evidence was found to suggest that time elapsed since the assault was associated with frequency of visits to the doctor, medication consumption, or psychosomatic complaints (respective correlations $r = .28, p$ not significant, $r = -.01, p$ not significant, $r = .21, p$ not significant).

Social relationships

The intensity of feelings of shame was correlated with negative reactions of the partner at the time of the assault ($r = .49, p < .05$), and the degree of alexithymia had a tendency to be correlated to negative reactions ($r = .36, p = .08, n = 24$). (See Table 4.) Type of perpetrator predicted the general dissatisfaction with social support, $F(1, 22) = 4.97, p < .05$. Victims of intimate and superficially known perpetrators were at the time of the study more satisfied with the support that they received from their social environment in the year preceding the interview ($M = 2.91, SD = 2.59$) than the victims of unknown perpetrators ($M = 4.77, SD = 1.42$).

Table 4

Simple Pearson Correlations Between the Characteristics of Impaired Sharing and Satisfaction With the Social Support in the Retrospective Group and Partial Correlations, Controlling for Lapse of Time Between Sexual Assault and Study

<i>n</i> = 33	Negative reaction of partner		Negative reaction of others (dissatisfaction with support in general)			
	<i>r</i>	<i>pr</i>	<i>r</i>	<i>pr</i>	<i>r</i>	<i>pr</i>
Postponed sharing	.14	.06	.07	-.16	.07	.17
Numbness	.22	.19	.25	.33	.15	.11
Alexithymia	.36	.36	-.24	-.27	.18	.21
Shame	.49*	.48*	-.15	-.02	.11	.13
Type of perpetrator	-.22	-.22	-.18	-.19	-.40*	-.38*

* $p < .05$. ** $p < .01$.

The results presented show that postponed sharing predicted health problems. An important question is whether postponed sharing predicted the health problems independently of the factor associated with postponed sharing, such as the type of perpetrator. When the type of perpetrator was held constant, the correlations between postponed sharing and psychosomatic complaints ($pr = .54, p < .01$), visits to the doctor ($pr = .37, p < .05$), and medication consumption ($pr = .33, p = .07$)

were found to be similar to the simple correlations. We already mentioned that the multivariate analysis showed that none of the sharing characteristics contributed to "psychosomatization," with the exception of postponed sharing. These results indicate that postponed sharing predicted medical behavior, independently of the type of perpetrator and of the other sharing characteristics.

DISCUSSION

Postponed sharing predicted health problems in the prospective as well as the retrospective study. In both studies it predicted the consumption of medication a year after the sexual traumatization. Both studies included a limited number of cases. Notwithstanding the small sample size, however, our findings quite robustly suggest that the time interval between sexual assault and disclosure of the trauma is an important variable predicting health problems. Pennebaker (1985) and Pennebaker, Barger, and Tiebout (1989) have suggested that secrecy implies inhibition of the expression of feelings, which operates as a stressor having a long-term impact on physical health. Pennebaker (1993, 1995) and Pennebaker, Barger, and Tiebout (1989) have suggested that long-lasting inhibition evokes chronic health problems. The wish to keep the trauma secret from others was one of the main reasons underlying postponed sharing, as a closer inspection of the comments accompanying the question about postponed sharing showed.

Our results put a question mark behind the assumption that only long-term inhibition evokes persistent health problems. In the prospective study the time interval between the sexual assault and the disclosure was about one month, and even this brief inhibition had a long-lasting impact on physical health. The inhibition of the expression of feelings was probably very strong during the time immediately following the assault. Most traumatized persons experienced the most intense emotional reaction shortly after the trauma. When a victim decided not to share this experience with the most important persons in her environment, this implies that she used strong inhibition strategies to prevent emotional expression of her feelings. Our finding that the intensity of feelings of numbness predicted medication consumption underlines the importance of the inhibition of feelings with respect to health impairment. The neurohormonal processes, which form the constituting element of numb feelings, are probably linked to the neurohormonal processes hampering the physical health of trauma victims.

In the prospective study postponed sharing predicted the frequency of visits to the doctor, but this was not the case in the retrospective study. This result suggests that about one year post-assault somatic symptoms were still in a phase of development, so the consultation of a doctor was still something that was needed, whereas, two or more years post-assault, somatic symptoms were stabilized and frequent consultation of the doctor was no longer necessary.

Postponed sharing did not predict psychosomatic complaints in the prospective study, but it was substantially correlated with psychosomatic symptoms in the retrospective study. It might be that before psychosomatic symptoms develop a person has to go through a period during which bodily sensations are considered to be threatening, and attention to such processes is suppressed. Extended prospective studies are needed to give a more accurate picture of the interaction between trauma, secrecy, somatic illnesses, and the development of psychosomatic complaints.

Victims of intimate perpetrators (friends, partners, ex-partners, or family members) were more prone to postpone sharing than victims of unknown or superficially known perpetrators. Victims of known perpetrators (superficially known or intimate) more often felt ashamed, and they more often expected a negative appraisal than in the case of traumatization by unknown perpetrators. Other authors have reported similar findings (Ullman, 1996a, 1996b; Ullman & Siegel, 1993; Wyatt, Notgrass, & Newcomb, 1990). Moreover, the social implications of disclosure of sexual assault by well-known perpetrators are more far-reaching. The social environment is forced to choose between feelings of loyalty to two different well-known persons. Questions about responsibility for traumatization are more prominent in the case of intimate perpetrators. The loyalty question may split families apart and social contacts may be lost (Ensink & van Berlo, 1999). The type of perpetrator predicted postponed sharing in both studies, but it did not independently contribute to health problems.

In the prospective study postponed sharing did not predict persistent intrusions. In the retrospective study postponed sharing was related to persistent intrusions, but regression analysis showed that numbness or alexithymia was a stronger predictor. Secrecy is thought to cause thought suppression (Wegner & Lane, 1995). In the prospective study thought suppression, conceived as an aspect of postponed sharing, lasted one month at most. Thought suppression as an acute reaction might be an adaptive strategy for the regulation of overwhelming emotions. Long-lasting thought suppression, as expressed by the time interval between assault and disclosure, is probably a non-adaptive strategy evoking chronic intrusions. Further study is needed to explore whether a limited time interval of secrecy has differential effects on health problems and intrusions of traumatic memories.

In the prospective as well as the retrospective group the time interval between the assault and the disclosure of the assault did not predict the quality of social relationships a year after the assault. The group of victims of known perpetrators should be distinguished from the group of victims of unknown perpetrators. Victims of known perpetrators tended to postpone sharing longer than victims of unknown perpetrators, but they were more satisfied after a year with the support that they received than the victims of unknown perpetrators.

Initial feelings of numbness did predict the general dissatisfaction with the social support that the person received a year after traumatization. Persons who felt numb

and detached after the traumatic experience have, by definition, difficulties in expressing emotional feelings. Expressing emotions is thought to play an essential role in generating social support (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995).

Our results underline the importance of breaking the silence soon after a sexual crime, in order to prevent persistent health problems. The focus of activities should especially be directed at victims of intimate perpetrators, such as ex-partners, friends, and family members, and to victims who feel numb after victimization. Victims of sexual assault who do not break the silence are difficult to reach for mental health professionals. Comprehensive programs addressing the prevention of rape and the reduction of the impact of rape appear to provide the best approach possible (Westhorp & Arman, 2000). In the "young people's rape prevention project," a "friends-focused" campaign is promoted because, among other reasons, 60 percent of young victims of sexual assault confide only to friends. In general, friends are the first to confide to, and women who confide to a friend have fewer posttraumatic stress symptoms a year after the trauma than women who do not confide to a friend but to somebody else in the social network (Ensink & van Berlo, 1999; Ullman, 1996a). Special programs about sexual harassment have been developed in the Netherlands at the instigation of the Ministry of Education, Culture and Science (1992) for different types of educational institutions. Such programs have the purpose of preventing sexual assault, and most educational institutions have assigned special confidential persons who can be addressed in case of assault or harassment. No information is available about the rate of sexual assault and the consultation of such persons, nor do we have information about the mediating role of friends in help-seeking behavior. Disclosure difficulties after sexual assault and the role of supportive reactions of friends can easily be incorporated into existing prevention programs.

Victim support services in the Netherlands (and probably not only in this country) focus their activities on persons who report to the police. However, in order to prevent persistent health problems it is important that victims who do not want to report to the police are also able to profit from victim services immediately after victimization.

REFERENCES

- American Psychiatric Association (APA). (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Banks, A. (1997, June-July). *A relational approach to the neurobiology of PTSD*. Paper presented at the Fifth European Conference on Traumatic Stress, Maastricht, The Netherlands.
- Berenbaum, H., & James, T. (1994). Correlates and antecedents of alexithymia. *Psychosomatic Medicine*, 56, 353-359.
- Bermond, B., Vorst, H., Gerritsen, W., & Vingerhoets, A. J. J. M. (in press). *Psychometric properties of the Amsterdam Alexithymia Scale*. Amsterdam, The Netherlands: Department of Psychology, University of Amsterdam.

- Dahl, S. (1993). *Rape: A hazard to health*. Oslo, Norway: Scandinavian University Press.
- Derogatis, L. R., Lipman, R. S., & Civi, L. (1973). SCL-90 an outpatient rating scale—preliminary report. *Psychopharmacology Bulletin*, 9, 13–27.
- Ensink, B. J., & Van Berlo, W. (1999). *Indringende herinneringen* [Intrusive memories]. Eburon, Delft, The Netherlands: NISSO Publications.
- Ensink, B. J., Winkel, F. W., & Van Berlo (submitted). Crime victims, alexithymia, numbness and posttraumatic stress. *International Review of Victimology*.
- Foa, E. B. (1995). *Posttraumatic Stress Diagnostic Scale (PDS): Manual*. Minneapolis, MN: National Computer Systems, Inc.
- Frenken, J., Ruitenberg D., & Rombouts, S. (1995). *Terugvechten: Verzet van vrou-wen tegen verkrachting*. Eburon, Delft, The Netherlands: NISSO Publications.
- Horowitz, M. J. (1986). *Stress response syndromes*. Northvale, NJ/London: Jason Aronson.
- Litz, B. T., Schlener, W. E., Weathers, F. W., Caddell, J. M., Fairbank, J. A., & LaVange, L. M. (1997). Predictors of emotional numbing in posttraumatic stress. *Journal of Traumatic Stress*, 10(4), 607–617.
- Ministry of Education, Culture and Science. (1992). *Project Preventie Seksuele Intimidatie in het Onderwijs*. Utrecht, The Netherlands: PPSI.
- Pennebaker, J. W. (1985). Traumatic experience and psychosomatic disease: Exploring the roles of behavioral inhibition, obsession and confiding. *Canadian Psychology*, 26, 82–94.
- Pennebaker, J. W. (1993). Putting stress into words: Health, linguistic, and therapeutic implications. *Behavioral Respiratory Therapy*, 31, 539–548.
- Pennebaker, J. W. (1993, 1995). *Emotion, disclosure and health*. Washington, DC: American Psychological Association.
- Pennebaker, J. W., Barger, S. D., & Tiebout, J. (1989). Disclosure of traumas and health among holocaust survivors. *Psychosomatic Medicine*, 51, 577–589.
- Pennebaker, J. W., Hughes, C. F., & O'Heeron, R. C. (1987). The psychophysiology of confession: Linking inhibitory and psychosomatic processes. *Journal of Personality and Social Psychology*, 52(4), 781–793.
- Rime, B. (1995). Mental rumination: Social sharing and the recovery from emotional exposure. In J. W. Pennebaker (Ed.), *Emotion, disclosure and health* (pp. 271–292). Washington, DC: American Psychological Association.
- Salovey, P., Mayer, J. D., Goldman, S. L., Turvey, C., & Palfai, T. P. (1995). Emotional attention, clarity, and repair: Exploring emotional intelligence using the trait meta-mood scale. In J. W. Pennebaker (Ed.), *Emotion, disclosure and health* (pp. 121–134). Washington, DC: American Psychological Association.
- Sifneos P. E. (1972). *Short-time psychotherapy and emotional crisis*. Cambridge, MA: Harvard University Press.
- Taylor, G. J. (1987). Alexithymia: Concept, measurement, and implications for treatment. *American Journal of Psychiatry*, 141, 725–732.
- Taylor, G. J., Bagby, M., & Parker, J. A. (Eds.). (1997). *Disorder of affect regulation: Alexithymia in medical and psychiatric illness*. Cambridge, MA: Cambridge University Press.
- Ullman, S. E. (1996a). Do social reactions to sexual assault victims vary by support provider? *Violence and Victims*, 11(2), 143–157.
- Ullman, S. E. (1996b). Social reactions, coping strategies, and self-blame attributions in adjustment to sexual assault. *Psychology of Women Quarterly*, 20, 505–526.
- Ullman, S. E., & Siegel, J. M. (1993). Victim-offender relationship and sexual assault. *Violence and Victims*, 8(2), 121–134.
- Vorst, H., & Bermond, B. (2001). The validity and reliability of the Bermond-Vorst Questionnaire. *Personality and Individual Differences*, 30, 413–434.
- Wegner, D. M., & Lane, J. D. (1995). From secrecy to psychopathology. In J. W. Pennebaker (Ed.), *Emotion, disclosure and health* (pp. 25–46). Washington, DC: American Psychological Association.
- Wegner, D. M., Schneider, D. J., Carter, S. R., & White, T. L. (1987). Paradoxical effects of thought suppression. *Journal of Personality and Social Psychology*, 53, 5–13.
- Westhorp, G., & Arman, L. (2000, August). *The young people's rape prevention project*. Paper presented at the 10th International Symposium on Victimology, Montreal, Canada.
- Wyatt, G. E., Notgrass, C. M., & Newcomb, M. (1990). Internal and external mediators of women's rape experiences. *Psychology of Women Quarterly*, 14, 153–176.